

IN THE CLAIMS:

Please cancel Claims 1, 8, 11, 21, 22, 24, 35, 38, 40, and 41, without prejudice or disclaimer of subject matter. Please amend Claim 28, as indicated below. The following is a complete listing of claims and replaces all prior versions and listings of claims in the present application:

Claims 1 - 27 (canceled).

Claim 28 (currently amended): A data communication apparatus which transfers object data to a destination node, said data communication apparatus comprising:

a control unit adapted (a) to determine a segment size and a segment data size in accordance with a size of a receiving buffer of the destination node, the size of the receiving buffer being determined by the destination node in accordance with a maximum payload size that can be received by the destination node, (b) to divide the object data into segments in accordance with the segment size₁, and (c) to divide each segment into a plurality of segment data in accordance with the segment data size₂ and

a data communication unit adapted (a) to generate packets from the plurality of segment data, and (b) to transfer the packets from said data communication apparatus to the destination node via a logical connection set between said data communication apparatus and the destination node, the logical connection being set by a controller.

Claims 29 - 42 (canceled).

Claim 43 (previously presented): A data communication apparatus according to claim 28, wherein said data communication apparatus is adapted to obtain connection information indicating the logical connection from the controller, and

wherein the packets generated by said data communication unit include the connection information.

Claims 44-45 (canceled).

Claim 46 (previously presented): A data communication apparatus according to claim 28, wherein the segment size of each segment is variable.

Claim 47 (canceled).

Claim 48 (previously presented): A data communication apparatus according to claim 28, wherein said data communication unit is adapted to transfer the packets via a serial bus conformed to IEEE 1394-1995 standard.

Claim 49 (previously presented): A data communication apparatus according to claim 28, wherein the object data includes image data.